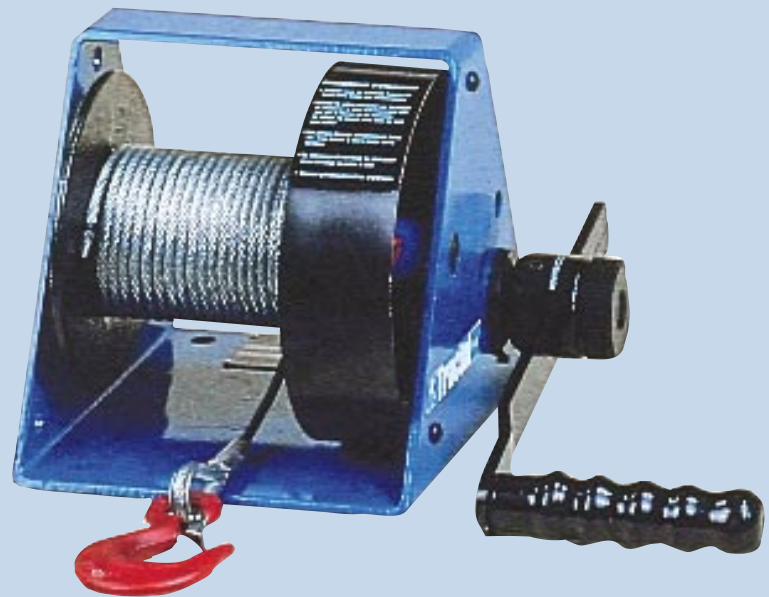


# carol

manual drum winches



Series TS



Series TR

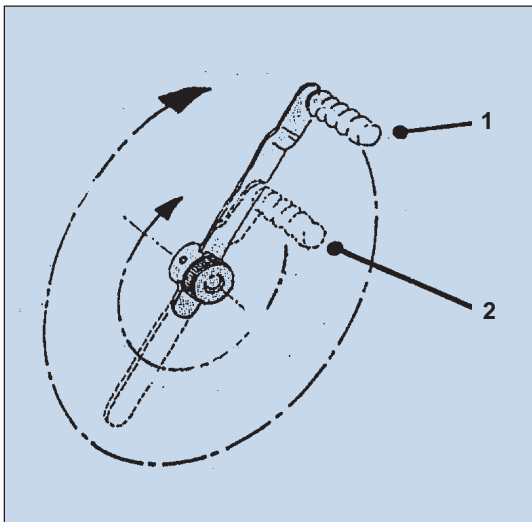
# Manual drum winches

## SERIES TR - TS

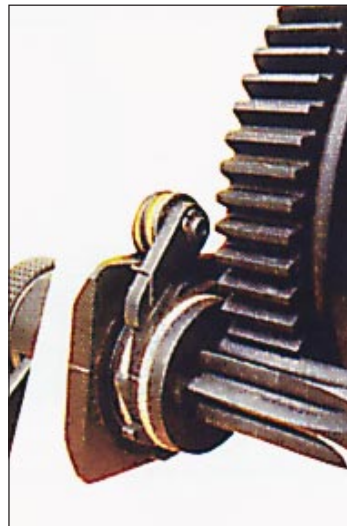


- Mechanism :  
The gears have been fully subjected to endurance and destruction tests.  
Hubs machined to retain lubrication.
- Automatic ratchet brake with stainless steel spring on both series.
- Weather resistant :  
Highly robust chassis and treated mechanical parts.
- Drum released by an easily accessible lever.
- Safety device to prevent release of the machine when under load.
- Mechanism protected by a removable casing.
- Wire rope anchor point :  
Adaptable to various rope diameters without any special tool.
- Adjustable handle length :  
Easy to use (see sketch below).
- Permanently attached handle adjustment knob :  
To adjust the handle or to prevent operation of the winch.

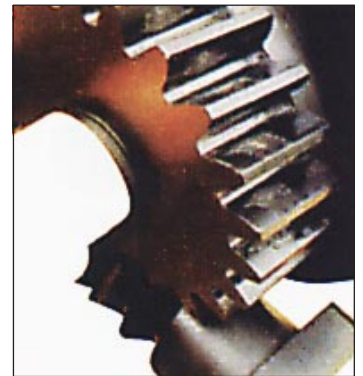
1 - TR Series : Manual geared winch  
2 - TS Series : Manual worm gear winch



Two positions of the handle :  
1 - Maximum power  
2 - Fast reeling  
(for low loads or rewinding the wire rope)

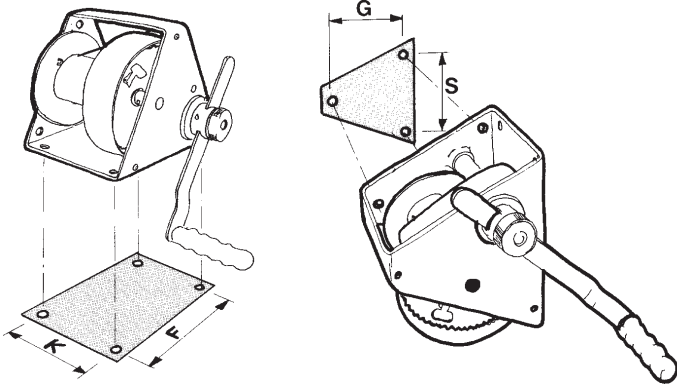


CAROL TR :  
Economic geared model



CAROL TS :  
Worm gear model  
with excellent finish  
and maximum safety.

# Dimensions and technical specification

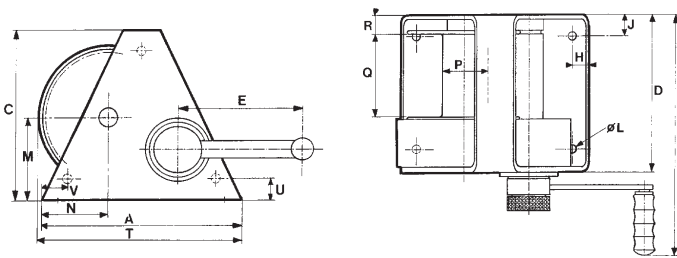


## TR SERIES

Manual geared winches

Capacities : 150 kg to 2000 kg

Force kg	A	B	C	D	E	F	G	H	J	K	∅L	M	N	∅P	Q	R	S	T	U	V
150	170	325	140	140	340	144	104	13	18	104	7 ∅ 9	70	85	55	62	40	122	-	18	24
300	240	385	200	200	240	200	155	20	28	144	7 ∅ 13	96	84	72	107	25	184	250	23	28
500	240	385	200	200	240	200	155	20	28	144	7 ∅ 13	96	84	75	107	25	184	250	23	28
1000	412	485	300	300	340	370	-	21	32	236	4 ∅ 17	145	130	101	176	35	-	422	-	-
2000	500	585	325	405	340	440	-	30	40	325	4 ∅ 21	155	145	121	250	-	-	510	-	-



Force	Nbre de vitesse	∅ mm	Câble Capacité maximum	Nbre de couches	Effort à la manivelle kg	Levée par tour de manivelle mm	Poids kg
150	1	4	22	6	15	185	8
300	1	5	40	6	10	35	16
500	1	6,8	20	4	13	35	16
1000	1	9	35	4	12	24	38
2000	1	13	30	3	13	13	70

### ANCHORING :

- **TR Series** : can be anchored in a number of positions either by the base or by the side, depending on the model.
- **TS Series** : using 4 or 6 anchor points at the rear of the unit, depending on the models.

## TS SERIES

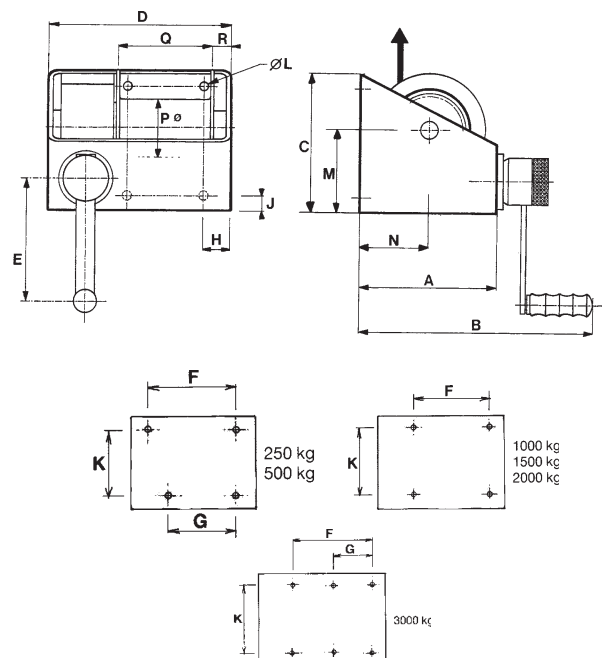
Manual worm gear winches

Capacities : 250 kg to 3000 kg

force kg	A	B	C	D	E	F	G	H	J	K	∅L	M	N	∅P	Q	R
250	150	330	150	200	240	137	100	25	15	118	4011	89	75	60	100	24
500	180	360	180	260	240	182	130	32	18	142	4013	109	90	70	145	30
1000	300	490	300	300	340	167	-	32	21	250	4017	180	146	101	176	30
1500	300	490	300	300	340	167	-	32	21	250	4017	180	145	101	176	30
2000	345	540	345	405	340	260	-	40	25	295	4021	222	168	121	275	40
3000	525	700	460	510	340	390	195	70	40	380	6025	325	173	168	300	55

Force kg	Nbre de vitesse	∅ mm	Câble Capacité maximum	Nbre de couches	Effort à la manivelle kg	Levée par tour de manivelle mm	Poids kg
250*	1	5	20	4	11	21	10
500	1	6,8	25	4	12	15	15
1000	1 et 2	9	35	4	14	12	35
1500	2	11,5	20	3	12	7	39
2000	2	13	30	3	15	8	61
3000	2	15	40	3	12	4	145

Note : The 250 kg model does not have a releasable drum.

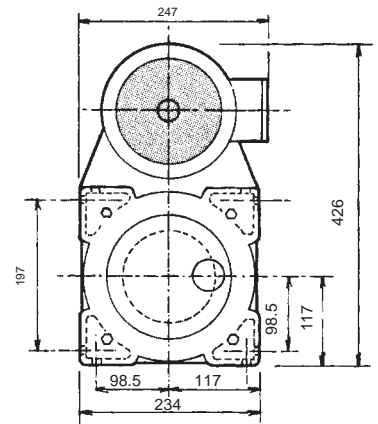
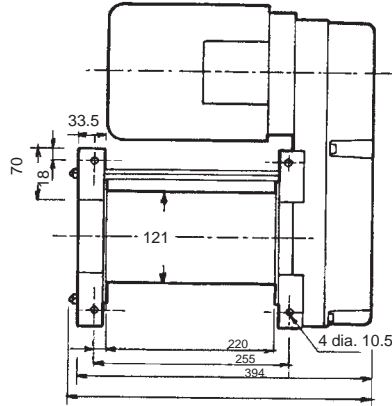
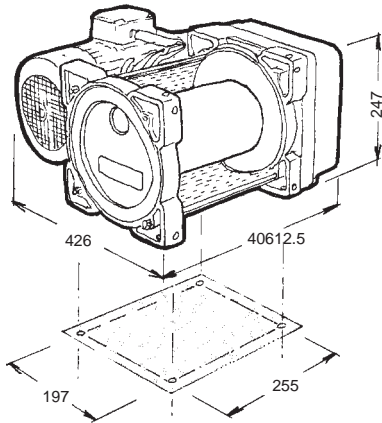


## Powered drum winches

**TE SERIES** : standard

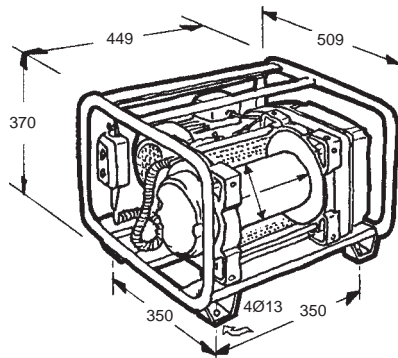
**TC SERIES** : with frame (for site operation)

Capacities : 200 kg and 300 kg



### TE SERIES

On 3 support sides, there are 4 anchor points forming a rectangle : 255 x 197 mm.



### TC SERIES

The brackets on the lower part of the frame allow scaffolding poles to be fitted, so that a variety of possible methods of anchoring and counterbalancing may be envisaged.

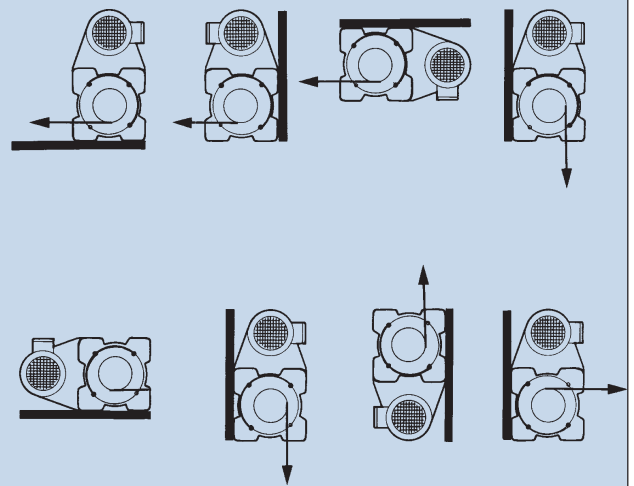
Motor kW	Capacity kg	Speed m/m	Rope Cap. m	Rope ø mm	Weight (kg)	
					TE	TC
1-0,75 single	200	25	60	5	39	50
1-0,75 single	300	20	60	5	39	50
1-0,75 3 ph.	200	25	60	5	39	50
1-0,75 3 ph.	300	20	60	5	39	50

Many lifting and pulling applications :

- Materials hoist for a variety of work
- Moving temporary covers or roofs on swimming pools and other structures.
- Trolleys travelling on inclines
- Scenery in theatres, opera houses and other entertainment centres.
- Hangar doors, furnace doors
- To-and-fro movement of loads on double ropes

- Single phase motor 220V, 50 Hz, lifting model, P= 0.75 kW - Speed : 1500 rpm  
Starting by capacitor at current close to rated current.  
Class F - Protection to IP55 - Starting current : 10 amp
- 3 phase motor 220/380V, 50 Hz, lifting model, P= 0.75 kW - Speed : 1500 rpm  
Class F - Protection to IP55 -
- Sealed oil-bath helical reduction gearing  
Reduction ratios : 18:1, 28:1, 31:1
- Electromagnetic brake with 24V D.C.  
P= 25 watts
- Welded steel drum.
- Electrical switchgear with weatherproof casing.
- Remote control with emergency stop, operating on low voltage (24 V).
- Upper and lower limit switches.
- Standard power supply connector.
- Other optional equipment on request.

### Multiple anchor positions



### TRACTEL SA

29, rue du Progrès  
F-93100 Montreuil  
Tél.: (1) 48 58 91 32  
Fax: (1) 48 58 19 95  
Telex: 230 020

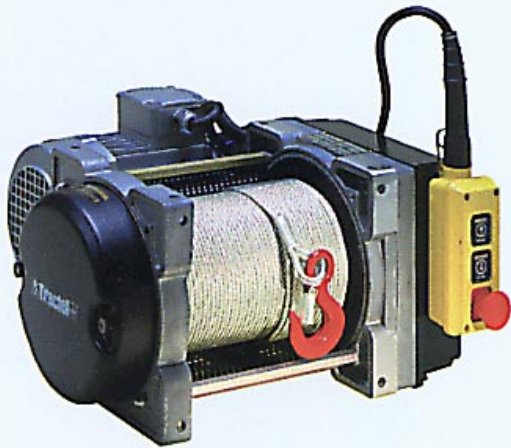


### SECALT SA

3, rue du Fort Dumoulin  
P.O.Box 1113  
L-1011 Luxembourg  
Tél.: 43 42 42 - Telex: 3437  
Fax: 43 42 14

# carol

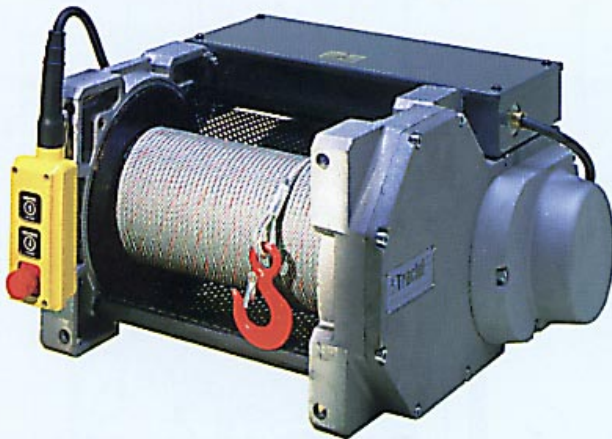
## powered drum winches



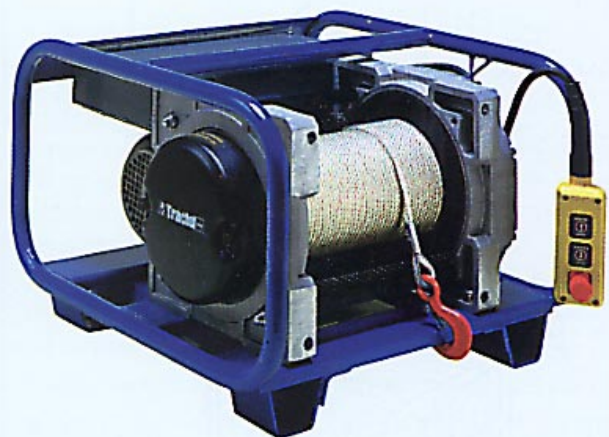
TE series: 200 and 300 kg



TC series: 200 and 300 kg



TE series: 500 and 800 kg



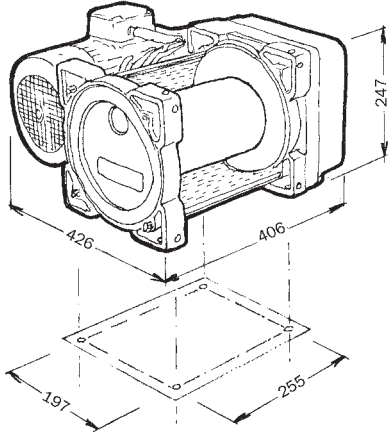
TC series: 500 and 800 kg

# TE-TC: THE MULTI-PURPOSE MOTORISED WINCH

**Weatherproof :** Made of pressed aluminium and polycarbonate, moulded and coloured.

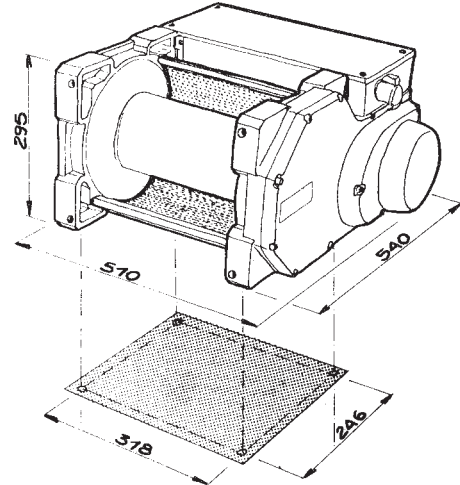
**Gearing :** The helical gear teeth significantly reduce the noise level. Gears greased and sealed for life.

**Remote control :** Low voltage (24 V) push-button control, with emergency stop and connection by 3 m flexible cable.



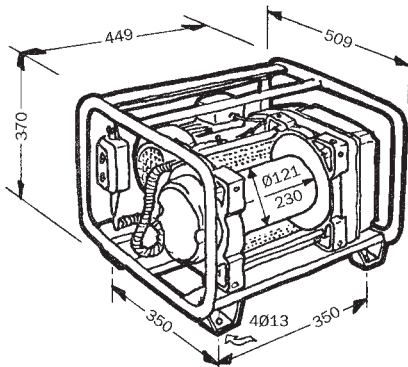
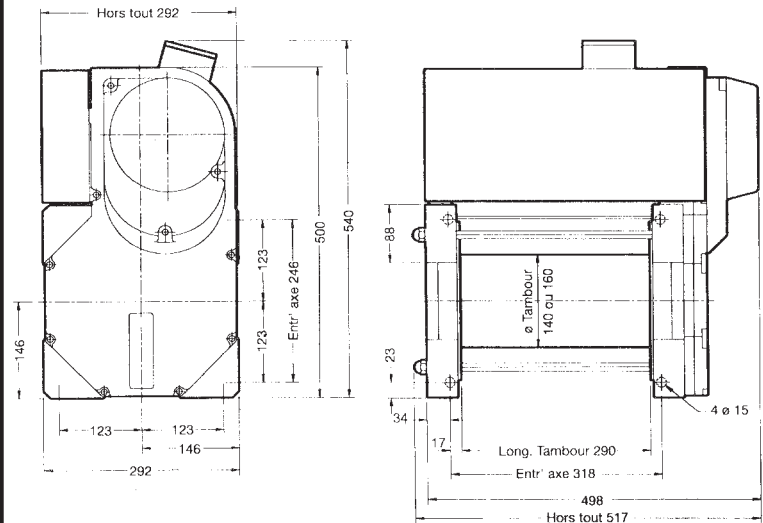
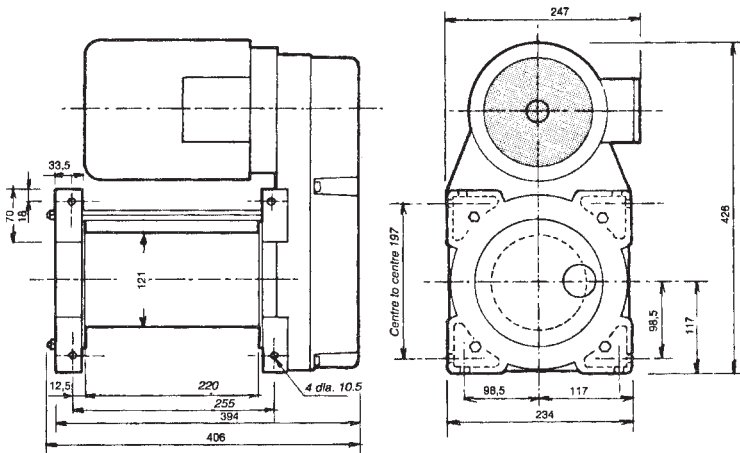
## SERIE TE : 200 et 300 kg

Sur les 3 plans d'appui, les 4 points de fixation forment un rectangle de 225 x 197.



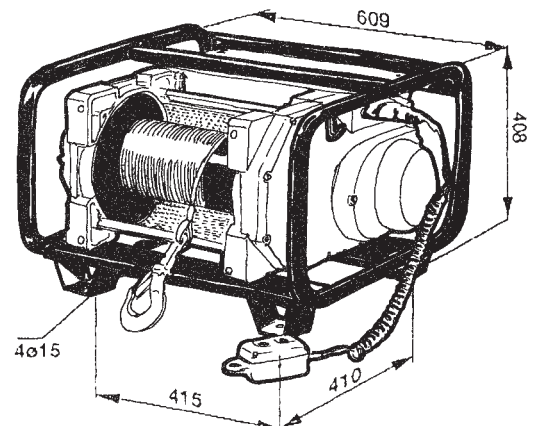
## SERIE TE : 500 et 800 kg

Sur les 2 plans d'appui, les 4 points de fixation forment un rectangle de 318 x 246



## SERIE TC : 200 et 300 kg

Les fourreaux en partie basse permettent le passage de tubes d'échafaudages, qui offrent toutes possibilités de fixation et de lestage.



## SERIE TC : 500 et 800 kg

Ø tambour : 140 mm - long. tambour : 290 mm

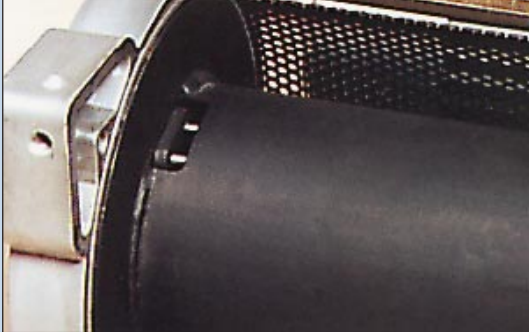
# TE-TC: THE MULTI-PURPOSE MOTORISED WINCH

Compact, high performance, rugged

TE series: standard

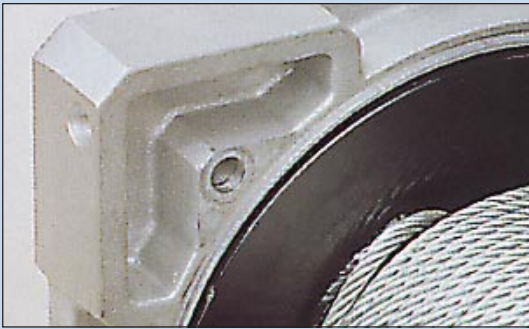
TC series: with frame (for site operation)

Winches in accordance with current legislation.



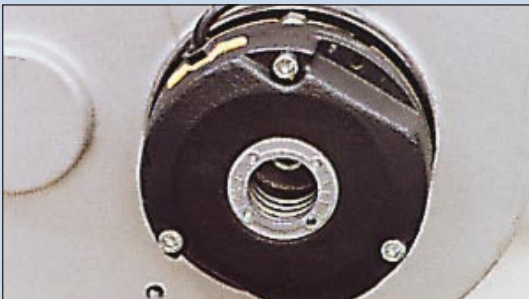
**Drum with wide flanges:** take up to 60 m of 5 mm dia wire rope

**Drum protection :** the wire rope is visible through the perforated shield



**Bolt holes :** for the multiple fixing points of the winch, there are purpose-made bolt holes to make the bolts captive without requiring a spanner

**Wire rope anchor point :** screwable bracket accessible from the outside, and which gives even reeling of the wire rope.



**Disc brake, operates without power:**

This electromagnetic brake holds the load as soon as the button on the remote control is released. The same happens should there be a power failure. For pulling applications only, the winch can be supplied without brake, so that manual unreeling of the wire rope is possible (except for models 500 kg and 800 kg).

## Technical specification

Motor kW	Capacity kg	Speed m/min	Wire Rope capacity (m)	Dia. of mm	Weight (kg)	
					TE	TC
0,75 single 0,75 3 ph.	200	25	60	5	39	50
	200	25	60	5	39	50
0,75 single 0,75 3 ph.	300	20	60	5	39	50
	300	20	60	5	39	50
1,5 single 0,55 3 ph.	500	12	85	6,8	85	95
	500	5	85	6,8	85	95
1,1 3 ph. 1,5 3 ph.	500	9	85	6,8	85	95
	500	12	85	6,8	85	95
2,2 3 ph. 3 3 ph.	500	18	85	6,8	85	95
	500	23	85	6,8	85	95
1,1 3 ph. 2,2 3 ph.	800	5	60	8	90	100
	800	10	60	8	90	100
2,2 3 ph. 3 3 ph.	800	13	60	8	90	100
	800	17	60	8	90	100

- Single phase motor 220 Vac, 50 Hz, lifting type.  
P = 0.75 kW (TE/TC series: 200kg and 300 kg capacities)  
P = 1.5 kW (TE/TC series: 500kg and 800 kg capacities)  
Speed 1500 rpm. Starting by condenser.  
Class F, IP 55 protection.
- 3 phase motor: 220/380 Vac, 50 Hz, lifting type.  
Class F, IP 55 protection.
- Sealed reduction gears in oil bath, with helical gears.
- Electromagnetic brake, 24 Vdc.
- Welded steel drum.
- Very high quality electrical wiring, protected under weatherproof cover.
- Low voltage (24 Volts) remote control with emergency stop.
- Upper and lower limit switches (TE/TC series: 200 kg and 300 kg capacities)
- Standard power supply connection.
- Optional equipment on request.

# Optional equipment

**Emergency hand heel:**

Coupled with a brake release lever, the hand wheel allows lowering or positioning a load when there is no power supply (photo no. 1).

**2<sup>nd</sup> wire rope anchor point:**

To lift a load with two wire ropes or arrange a "to-and-fro" system (photo no. 2).

**Electronic load limiter:**

Stops the winch should there be an overload condition

**Slack wire rope detector:**

This device automatically stops the winch when the wire rope is not under tension; for example, on lowering, when the load may lodge on an obstacle (photo no. 5)

**Thermal cut-out:**

With automatic reset, to protect the motor.

**Motors (TE series 200/300 kg) :**

- single phase: 110/220 volts, 50 or 60 Hz;
- 3 phase: 380-440-660 volts, 50 or 60 Hz;
- 750-1000-3000 rpm;
- special protection on request.

**Limit switches:**

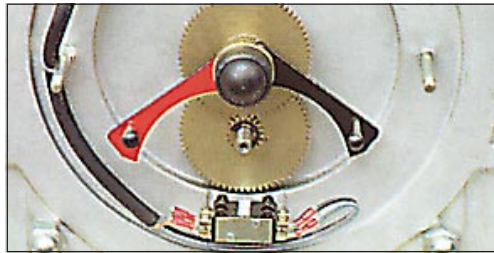
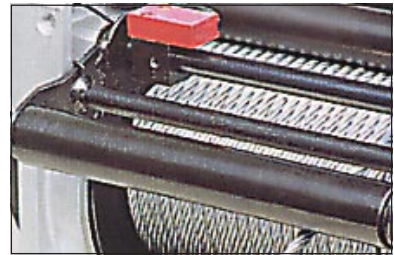
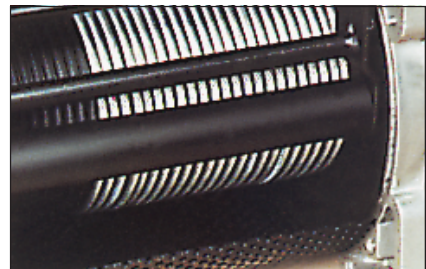
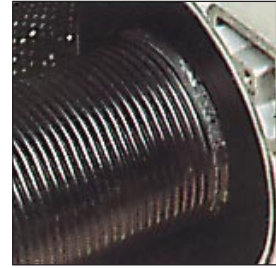
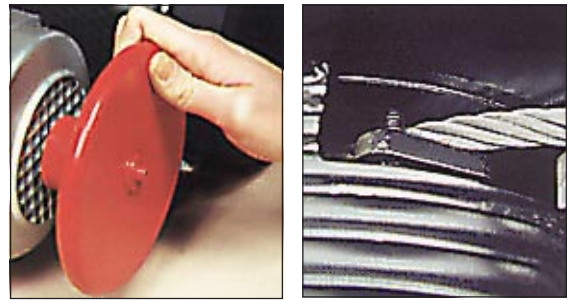
Devices which stop lifting or lowering at pre-determined points (photo no 6).

**Grooved drum:**

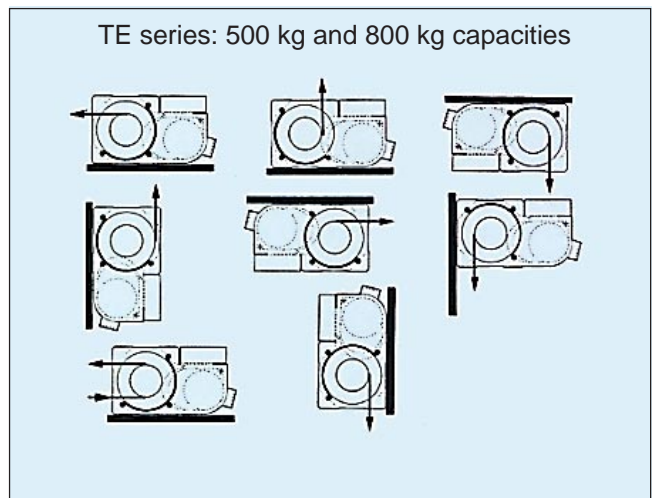
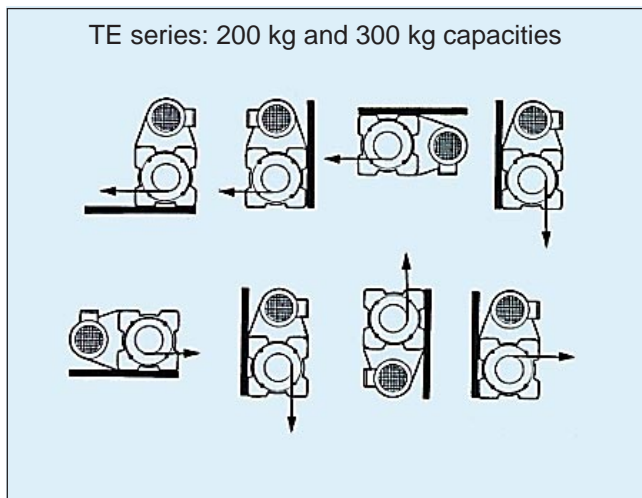
Makes reeling easier. Essential for to-and-fro systems (photo no. 3).

**Wire rope pressure roller:**

an essential complement for the grooved drum, when the wire rope is not in permanent tension (photo no. 4).



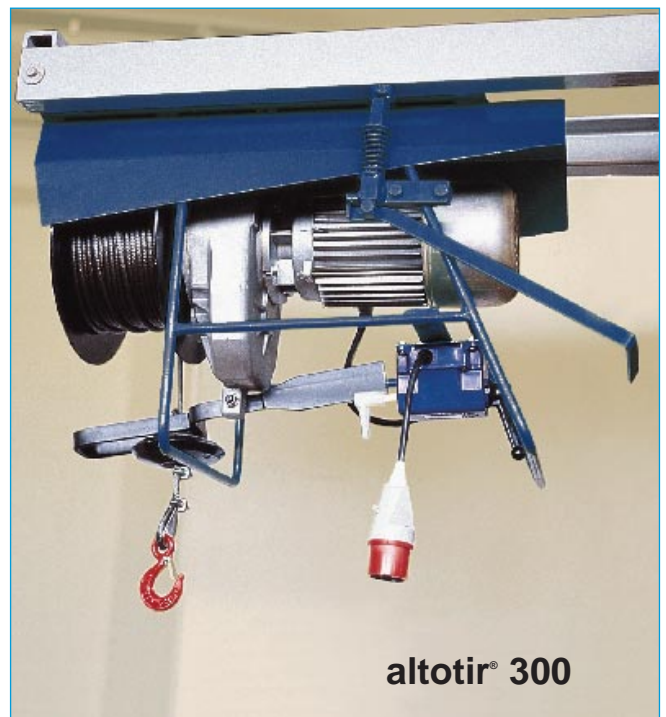
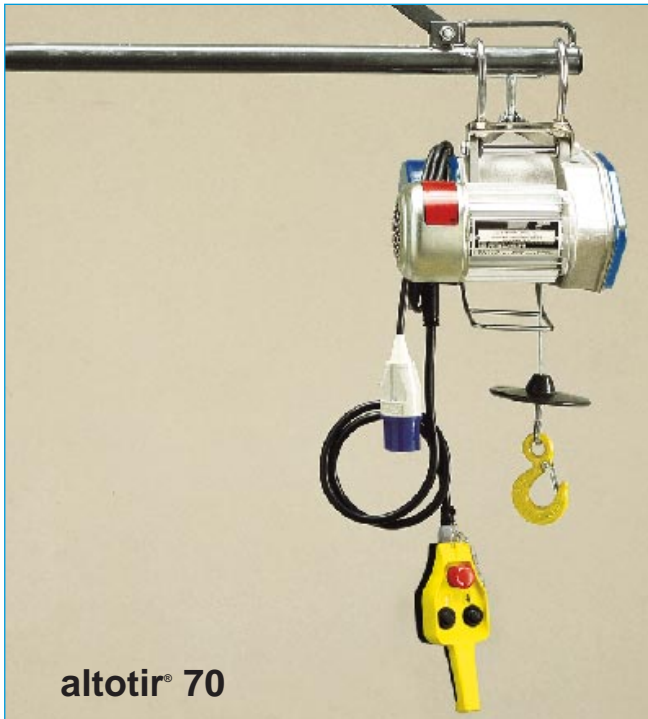
## Multi-function Multiple anchor points





# altotir®

builders' hoists  
70 kg to 300 kg



## The ideal answer for lifting on site

**altotir® 70**, compact, lightweight and reliable. Can be installed practically anywhere with its quick fit system. The long jib (optional: 1.5m) allows even bulky items to be lifted.

**altotir® 150 and altotir® 200**: specially designed for industrial usage, such as on construction sites and in restricted areas. Supplied with suspension jib and two fixing legs.

**altotir® 300**: developed for reliability and maximum safety. Its high lifting capacity and its frame mounting allow a wide range of applications.



**Ideal transversal reeling of the wire rope on the drum.**

*The drum is mounted transversally on the main frame giving a better reeling and unreeling of the wire rope along its complete length.*

## The design of the ALTOTIR makes them safe and easy to use:

- ◆ All models fitted with positively acting electrical upper limit switch and return spring on ALTOTIR 150.
- ◆ The steel spring permanently reeled on the drum.
- ◆ Push button control with emergency stop button, to standard IP 65.
- ◆ Wide opening hook with safety catch.
- ◆ Single phase motor, 230 V / 50 Hz.
- ◆ Thermal protection switch.
- ◆ In accordance with the «Machine» directive: 89/392/CEE, amended by 91/368/CEE, 93/44/CEE and 93/68/CEE.

*option : Choice of anchoring systems depending on requirements.*

- ❖ mounting frame for altotir® 300
- ❖ internal leg with height adjustment from 2 m to 3.3 m
- ❖ lateral window leg
- ❖ anchoring system for scaffolding
- ❖ containers for counterweights

Specification	Unit	altotir® 70	altotir® 150	altotir® 200	altotir® 300
Capacity on hook	kg	70	150	200	300
Lifting speed	m/min	19	19	20	25
Power of electric motor	kW/V	0.3/230	0.45/230	0.7/230	0.88/230
Dia. of wire rope	mm	4	5	5	6
Length of wire rope	m	26	26	26	26
Maximum working height	m	25	25	25	25
Packed dimensions	mm	400x330x370	820x350x500	820x350x500	820x350x500
Weight with control box	kg	19	39	48	57

